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EXAMINER	
LEE, Y MY QUACH	
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/801,177	BELLIVEAU, RICHARD S.	
	Examiner	Art Unit	
	Y M. Lee	2885	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *30 August 2010*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-82* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☒ Claim(s) *1-12,33 and 34* is/are allowed.

6)☒ Claim(s) *13-26, 31, 32, 35-43, 48-64, 69-73 and 75-82* is/are rejected.

7)☒ Claim(s) *27-30,44-47,65-68 and 74* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1. The Board of Patent Appeals and Interferences (BPAI) reversed the Examiner in their decision mailed 30 August, 2011 on applicant's appeal from the Examiner's rejection of claims 1 to 82 (patented claims 1 to 12 and reissue claims 13 to 82) as being based upon a defective reissue oath or declaration under 35 U.S.C. 251 for lack of error.

2. In view of first action on the merits over reissue claims 13 to 82 based on the prior art, PROSECUTION IS HEREBY REOPENED (MPEP 1214.04). Rejections hereby set forth below.

3. A Technology Center Director or designee has approved of reopening prosecution by signing below.

/JOSEPH THOMAS/
Director, Technology Center 2800

Claim Objections

4. Claim 74 is objected to because of the following formalities: In claim 74, line 1, the term "further" should be changed to "the substrate" to properly define the claimed invention. Appropriate correction is required.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

6. **Claims 13 to 24, 31 and 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pederson (US 6,461,008).**

Regarding claim 13, Pederson discloses a lighting apparatus comprising a substrate (54, LED mounting surface, column 18, line 66), a plurality of light emitting diodes (30, column 18, line 4; 306, column 31, line 29), a lamp driver circuit (53), a communications component (50, 52), a first housing (12, figure 9; 12, 14, column 20, lines 50, 55 and 56) in which the substrate is located (column 18, lines 60 to 63 and 65 to 67), wherein the substrate has a first circuit (for example, figure 9, the first circuit is a series of electrically connected LEDs 30 as shown in first column of columns A, B, C, D, E, F, G, H, I, J and the circuit of each column is also shown as AA, BB, CC, DD, EE, FF, GG, HH, II, JJ in figures 11A-11C or a series of electrically connected LEDs 30 as shown in first row 34 or first segment of individual segments 330, 332, 333 as shown in figure 35) and a second circuit (for example, figure 9, the second circuit is a series of electrically connected LEDs 30 as shown in second column of columns A, B, C, D, E, F, G, H, I, J and the circuit of each column is also shown as AA, BB, CC, DD, EE, FF, GG, HH, II, JJ in figures 11A-11C or a series of electrically connected LEDs 30 as shown in second row 34 or second segment of individual segments 330, 332, 333 as shown in figure 35), the lamp driver circuit is electrically connected to the first circuit and the second circuit, a first portion (for example, light emitting diodes of column A) of the plurality of light emitting diodes are connected to the first circuit, the first circuit can vary the intensity of the light emitted by the first portion of the plurality of light emitting diodes (column 18, lines 31 to 46, column 28, lines 43 to 51, column 30, lines 22 to 26), a second portion (for example, light emitting diodes of column B) of the plurality of light emitting diodes are connected to the second circuit, the second circuit can vary the intensity of the light emitted by the second portion of the plurality of light emitting diodes (column 18, lines 31 to 46, column 28, lines 43 to 51, column 30, lines 22 to 26),

Regarding claims 17 to 19, the communications component can receive a control command for varying either the intensity of the first portion of the plurality of light emitting diodes or the second portion of the plurality of light emitting diodes to change the color temperature of the light emitted from the plurality of light emitting diodes (column 19, lines 1 to 3, column 28, lines 43 to 65, column 30, lines 20 to 26),

Regarding claim 20, a second housing (120, figure 15; 742, figure 60; 762, figure 65; the housing which reference numeral 780 is pointing, figure 66) and an electrical component (96.2, 738, 794) located within the second housing,

Regarding claim 22, the first housing which can pan and tilt (figures 3, 15, 65 and 66) in relation to the second housing by a motor (90, 96.1, 96.2, 794),

Regarding claim 23, a position of the first housing relative to the second housing is caused by remote control (motor, hinge, gears, figures 3, 15, 60, 65 and 66),

Regarding claim 24, a communication line (electrical wires from the electrical components processor controller 52, 50 to the LEDs and motors) can provide a control signal,

Regarding claim 31, the substrate is a flexible substrate (column 20, line 66, column 21, lines 6 to 9, column 57, lines 7 to 8, the housing 14 is flexible to form variety of shapes as desired, the circuit board attached inside the housing is therefore also flexible to conform with the shape of the housing, note figures 4, 5 and 12), and

Regarding claim 32, the substrate is a curved substrate (column 20, line 66, column 21, lines 6 to 9, column 57, lines 7 to 8, the housing 14 is flexible to form variety of shapes as desired, the circuit board substrate attached inside the housing is therefore also flexible to conform to the curved shape of the housing to form the curved substrate as shown in figures 4, 5 and 12).

However, Pederson does not specifically disclose that the first portion of the plurality of light emitting diodes emits light of a first color different than the second portion of the plurality of light emitting diodes which emits light of a second color with the first color generated by yellow light emitting diodes, amber light emitting diodes, any of red, blue or green light emitting diodes, and the second color generated by white light emitting diodes.

Regarding claims 14 to 16, Column 21, lines 10 to 20 of Pederson state that the array of LEDs 30, the column 32 or row 34 may be formed of the same or different colored, a series of different colored LEDs, the controller may be configured to select the color of the LED's to be illuminated, the user may select blue, red, white, yellow, green, amber or any combination thereof, and the individual LED's may be selectively illuminated at the discretion of an individual.

It would have therefore been obvious to one skilled in the art to connect the first portion of the plurality of light emitting diodes of a first color by yellow light emitting diodes, amber light emitting diodes or by any of red, blue or green light emitting diodes different from the second portion of the plurality of light emitting diodes of a second color by white light emitting

diodes, in view of the teaching of column 21, lines 10 to 20 of Pederson, for illuminating the color LEDs as preferred at the discretion of an individual.

With regards to the electrical component processor disposed within the second housing of claim 21, it would have been obvious to one skilled in the art to dispose the electrical component processor within the second housing for protection from the heat and moisture.

7. **Claims 35 to 41, 48 and 49 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pederson.**

Regarding claim 35, Pederson discloses a lighting apparatus for projecting light onto a surface comprising a substrate (54, LED mounting surface, column 18, line 66; 310, column 31, line 28; circuit board or LED mounting surface 482, column 51, lines 48 to 49), a communications component (50, 52), first, second, third, fourth, fifth and sixth light emitting diodes (30, column 18, line 4; 306, column 31, line 29; 732, column 51, line 30), each of which is fixed to the substrate, a first housing (12, figure 9; 12, 14, column 20, lines 50, 55, 56) where the substrate is located (column 18, lines 60 to 63, 65 to 67, the circuit board 54 or LED mounting surface having microprocessor 52 contained within the housing 12), wherein each of the first, second, third, fourth, fifth and sixth light emitting diodes emits light having an intensity, the substrate has first, second, third, fourth, fifth and sixth circuits (for example, figure 9, the first circuit is a series of electrically connected LEDs 30 as shown in column A, the second circuit is a series of electrically connected LEDs 30 as shown in column B, the third circuit is a series of electrically connected LEDs 30 as shown in column C, the fourth circuit is a series of electrically connected LEDs 30 as shown in column D, the fifth circuit is a series of electrically connected LEDs 30 as shown in column E, the sixth circuit is a series of electrically connected LEDs 30 as shown in column F and the circuit of each column also shown as AA, BB, CC, DD, EE, FF in figures 11A-11C or a series of electrically connected LEDs 30 as shown in different rows 34 or individual segments 330, 332, 333 as shown in figure 35), the first light emitting diode is connected to the first circuit and the first circuit can vary the intensity of light emitted by the first light emitting diode (column 18, lines 31 to 46, column 21, lines 18 to 20, column 28, lines 43 to 54, column 30, lines 22 to 26), the second light emitting diode is connected to the second circuit and the second circuit can vary the intensity of light emitted by the second light emitting diode

(column 18, lines 31 to 46, column 21, lines 18 to 20, column 28, lines 43 to 54, column 30, lines 22 to 26), the third light emitting diode is connected to the third circuit and the third circuit can vary the intensity of light emitted by the third light emitting diode (column 18, lines 31 to 46, column 21, lines 18 to 20, column 28, lines 43 to 54, column 30, lines 22 to 26), the fourth light emitting diode is connected to the fourth circuit and the fourth circuit can vary the intensity of light emitted by the fourth light emitting diode (column 18, lines 31 to 46, column 21, lines 18 to 20, column 28, lines 43 to 54, column 30, lines 22 to 26), the fifth light emitting diode is connected to the fifth circuit and the fifth circuit can vary the intensity of light emitted by the fifth light emitting diode (column 18, lines 31 to 46, column 21, lines 18 to 20, column 28, lines 43 to 54, column 30, lines 22 to 26), the sixth light emitting diode is connected to the sixth circuit and the sixth circuit can vary the intensity of light emitted by the sixth light emitting diode (column 18, lines 31 to 46, column 21, lines 18 to 20, column 28, lines 43 to 54, column 30, lines 22 to 26), each of the intensities of light of the first, second, third, fourth, fifth and six light emitting diodes can be varied independently of each of the other intensities of light of the first, second, third, fourth, fifth, and sixth light emitting diodes (column 18, lines 31 to 46, column 19, lines 1 to 3, column 21, lines 18 to 20, column 30, lines 20 to 26); the first, second, third, fourth, fifth and sixth light emitting diodes emit light of first, second, third, fourth, fifth and sixth wavelengths (column 21, lines 10 to 20) respectively, the communications component can receive a control command for varying each of the intensities of light of the first, second, third, fourth, fifth and sixth light emitting diodes (column 18, lines 31 to 46, column 21, lines 13 to 20, column 30, lines 22 to 26, column 31, lines 53 to 56). However, Pederson does not specifically disclose that the first light emitting diode connected to the first circuit emits light of a first color, the second light emitting diode connected to the second circuit emits light of a second color, the third light emitting diode connected to the third circuit emits light of a third color, the fourth light emitting diode connected to the fourth circuit emits light of a fourth color, the fifth light emitting diode connected to the fifth circuit emits light of a fifth color, the sixth light emitting diode connected to the sixth circuit emits light of a sixth color with the first, second, third, fourth, fifth and sixth colors are different.

Regarding claim 36, Column 21, lines 10 to 20 of Pederson state that the array of LEDs 30, the column 32 or row 34 may be formed of the same or different colored, a series of different

colored LEDs, the controller may be configured to select the color of the LED's to be illuminated, the user may select blue, red, white, yellow, green, amber or any combination thereof, and the individual LED's may be selectively illuminated at the discretion of an individual.

It would have therefore been obvious to one skilled in the art to connect the first light emitting diode to the first circuit of a first color, the second light emitting diode to the second circuit of a second color, the third light emitting diode to the third circuit of a third color, the fourth light emitting diode to the fourth circuit of a fourth color, the fifth light emitting diode to the fifth circuit of a fifth color, the sixth light emitting diode to the sixth circuit of a sixth color with the first, second, third, fourth, fifth and sixth colors different, as shown by column 21, lines 10 to 20 of Pederson, for selectively illuminating different color LEDs as preferred at the discretion of an individual.

Regarding claim 37, a second housing (120, 742, 762) and an electrical component (90, 96.2, column 23, lines 10 to 11, figure 15; 738, figure 60; 794, figures 63, 65 and 66) is located within the second housing,

Regarding claim 38, the electrical component is a battery (738, figure 60),

Regarding claim 39, the first housing can pan and tilt in relation to the second housing by a motor (90, 96.2, figure 15; 794, figures 63, 65 and 66),

Regarding claim 40, the rotation of the first housing relative to the second housing is caused by remote control (90, 96.2, figure 15; 794, figures 63, 65 and 66),

Regarding claim 41, a communications line (electrical wires, 97) is connected to the second housing,

Regarding claim 48, the substrate is a flexible substrate (column 20, line 66, column 21,

lines 6 to 9, column 57, lines 7 to 8, the housing 14 is flexible to form variety of shapes as desired, the circuit board attached inside the housing is therefore also flexible to conform with the shape of the housing, note figures 4, 5 and 12), and

Regarding claim 49, the substrate is a curved substrate (column 20, line 66, column 21, lines 6 to 9, column 57, lines 7 to 8, the housing 14 is flexible to form variety of shapes as desired, the circuit board substrate attached inside the housing is therefore also flexible to

conform to the curved shape of the housing to form the curved substrate as shown in figures 4, 5 and 12).

8. **Claims 50 to 62 and 69 to 70 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pederson.**

Regarding claim 50, Pederson discloses a lighting apparatus for projecting light onto a surface comprising a substrate (54, LED mounting surface, column 18, line 66; 310, column 31, line 28; circuit board or LED mounting surface 482, column 51, lines 48 to 49), first, second, third, fourth, fifth and sixth light emitting diodes (30, column 18, line 4; 306, column 31, line 29; 732, column 51, line 30), each of which is fixed to the substrate, a first housing (12, figure 9; 12, 14, column 20, lines 50, 55 and 56) in which the substrate is located (column 18, lines 60 to 63, 65 to 67, the circuit board 54 or LED mounting surface having microprocessor 52 contained within the housing 12), a communications component (50, 52), wherein each of the first, second, third, fourth, fifth and sixth light emitting diodes emit light having an intensity, the substrate has first, second, third, fourth, fifth and sixth circuits (for example, figure 9, the first circuit is a series of electrically connected LEDs 30 as shown in column A, the second circuit is a series of electrically connected LEDs 30 as shown in column B, the third circuit is a series of electrically connected LEDs 30 as shown in column C, the fourth circuit is a series of electrically connected LEDs 30 as shown in column D, the fifth circuit is a series of electrically connected LEDs 30 as shown in column E, the sixth circuit is a series of electrically connected LEDs 30 as shown in column F and the circuit of each column also shown as AA, BB, CC, DD, EE, FF in figures 11A-11C or a series of electrically connected LEDs 30 as shown in different rows 34 or individual segments 330, 332, 333 as shown in figure 35), the first light emitting diode is connected to the first circuit and the first circuit can vary the intensity of light emitted by the first light emitting diode (column 18, lines 31 to 46, column 21, lines 18 to 20, column 28, lines 43 to 54, column 30, lines 22 to 26), the second light emitting diode is connected to the second circuit and the second circuit can vary the intensity of light emitted by the second light emitting diode (column 18, lines 31 to 46, column 21, lines 18 to 20, column 28, lines 43 to 54, column 30, lines 22 to 26), the third light emitting diode is connected to the third circuit and the third circuit can vary the intensity of light emitted by the third light emitting diode (column 18, lines 31 to 46, column

21, lines 18 to 20, column 28, lines 43 to 54, column 30, lines 22 to 26), the fourth light emitting diode is connected to the fourth circuit and the fourth circuit can vary the intensity of light emitted by the fourth light emitting diode (column 18, lines 31 to 46, column 21, lines 18 to 20, column 28, lines 43 to 54, column 30, lines 22 to 26), the fifth light emitting diode is connected to the fifth circuit and the fifth circuit can vary the intensity of light emitted by the fifth light emitting diode (column 18, lines 31 to 46, column 21, lines 18 to 20, column 28, lines 43 to 54, column 30, lines 22 to 26), the sixth light emitting diode is connected to the sixth circuit and the sixth circuit can vary the intensity of light emitted by the sixth light emitting diode (column 18, lines 31 to 46, column 21, lines 18 to 20, column 28, lines 43 to 54, column 30, lines 22 to 26), each of the light intensities of the first, second, third, fourth, fifth and six light emitting diodes can be varied independently of each of the other light intensities of the first, second, third, fourth, fifth, and sixth light emitting diodes (column 19, lines 1 to 3, column 21, lines 10 to 20), the communications component can receive a control command for varying each of the light intensities of each of the first, second, third, fourth, fifth and sixth light emitting diodes (column 21, lines 13 to 20),

Regarding claim 51, a seventh light emitting diode which emits light having an intensity, the substrate has a seventh circuit (the seventh circuit is a series of electrically connected LEDs 30 as shown in column G and the circuit of column G also shown as GG in figures 11A-11C), the seventh light emitting diode is connected to the seventh circuit and the seventh circuit can vary the intensity of light emitted by the seventh light emitting diode (column 18, lines 31 to 46, column 21, lines 18 to 20, column 28, lines 43 to 54, column 30, lines 22 to 26).

However, Pederson does not specifically disclose that the first light emitting diode connected to the first circuit, the second light emitting diode connected to the second circuit, the third light emitting diode connected to the third circuit, the fourth light emitting diode connected to the fourth circuit, the fifth light emitting diode connected to the fifth circuit, the sixth light emitting diode connected to the sixth circuit are all emit light of a first color which is white and the seventh light emitting diode connected to the seventh circuit emits light of a second color which is amber, yellow or red.

Regarding claims 52 to 55, Column 21, lines 10 to 20 of Pederson state that the array of LEDs 30, the column 32 or row 34 may be formed of the same or different colored, a series of

different colored LEDs, the controller may be configured to select the color of the LED's to be illuminated, the user may select blue, red, white, yellow, green, amber or any combination thereof, and the individual LED's may be selectively illuminated at the discretion of an individual.

It would have therefore been obvious to one skilled in the art to connect the first light emitting diode to the first circuit, the second light emitting diode to the second circuit, the third light emitting diode to the third circuit, the fourth light emitting diode to the fourth circuit, the fifth light emitting diode to the fifth circuit, the sixth light emitting diode to the sixth circuit all in the first color which is white and to connect the seventh light emitting diode to the seventh circuit in the second color which is amber, yellow or red, as shown by column 21, lines 10 to 20 of Pederson, for illuminating different color LEDs as preferred at the discretion of an individual.

Regarding claim 56, the intensity of the first color is varied to change the color temperature of the light projected onto the surface by the lighting apparatus (column 18, lines 31 to 46, column 21, lines 10 to 20, column 28, lines 43 to 65, column 30, lines 22 to 26),

Regarding claim 57, the intensity of the second color is varied to change the color temperature of the light projected onto the surface by the lighting apparatus (column 18, lines 31 to 46, column 21, lines 10 to 20, column 28, lines 43 to 65, column 30, lines 22 to 26),

Regarding claim 58, a second housing (120, 742, 762) and an electrical component (90, 96.2, column 23, lines 10 to 11, figure 15; 738, figure 60; 794, figures 63, 65 and 66) located within the second housing,

Regarding claim 59, the electrical component is a battery (738, column 52, line 32),

Regarding claim 60, the first housing can pan and tilt in relation to the second housing by a motor (90, 96.2, 794),

Regarding claim 61, the rotation of the first housing relative to the second housing is caused by remote control (90, 96.2, figure 15; 794, figures 63, 65 and 66),

Regarding claim 62, a communications line (electrical wire, 97) is connected to the second housing,

Regarding claim 69, the substrate is a flexible substrate (column 20, line 66, column 21, lines 6 to 9, column 57, lines 7 to 8, the housing 14 is flexible to form variety of shapes as

desired, the circuit board attached inside the housing is therefore also flexible to conform with the shape of the housing, note figures 4, 5 and 12), and

Regarding claim 70, the substrate is a curved substrate (column 20, line 66, column 21, lines 6 to 9, column 57, lines 7 to 8, the housing 14 is flexible to form variety of shapes as desired, the circuit board substrate attached inside the housing is therefore also flexible to conform to the curved shape of the housing to form the curved substrate as shown in figures 4, 5 and 12).

9. **Claims 25, 42 and 63 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pederson in view of Deese (US 5,806,965).**

Pederson discloses the invention substantially as claimed with the exception of disclosing ventilation holes located in the substrate in proximity to any of the light emitting diodes.

Deese teaches ventilation holes (82, 84) located in the substrate in proximity to any of the light emitting diodes for providing heat dissipation and cooling capacity.

It would have been obvious to one skilled in the art to provide in the substrate of Pederson with the ventilation holes in proximity to any of the light emitting diodes of the first and second portions, as shown by Deese, for heat dissipation and cooling capacity.

10. **Claims 26, 43 and 64 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pederson in view of Deese, as applied to claims 25, 42, 63 above, and further in view of Maas (US 6,402,347).**

Pederson as modified by Deese discloses the invention substantially as claimed with the exception of disclosing a fan.

Maas teaches a fan (26) forcing air through ventilation holes (column 5, line 31).

It would have been obvious to one skilled in the art to provide Pederson as modified by Deese with a fan, as shown by Maas, for forcing air through the ventilation holes for enhancing the cooing capacity.

11. **Claims 71 and 72 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pederson.**

Pederson discloses the invention substantially as claimed with the exception of disclosing that the first color and the second color is ultraviolet. With regards to the specific ultraviolet color, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to select the ultraviolet color as claimed in an attempt to improve and provide different colors of the light effects or appearances since the courts have stated that matters relating to ornamentation only which have no mechanical function cannot be relied upon to patentably distinguish the claimed invention from the prior art. *In re Seid*, 161 F.2d 229, 73 USPQ 431 (CCPA 1947).

12. **Claims 73, 76 and 77 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pederson.**

Regarding claim 73, Pederson discloses a lighting device for projecting light onto a surface comprising a first housing (12, figures 3, 9; 12, 14, column 20, lines 50, 55 and 56; figures 15, 31, 60 and 66), the first housing comprising a substrate (54, LED mounting surface, column 18, line 66; 310, column 31, line 28; circuit board or LED mounting surface 482, column 51, lines 48 to 49) and a plurality of light emitting diodes (30, column 18, line 4; 306, column 31, line 29; 732, column 51, line 30), wherein the substrate has a first circuit (for example, figure 9, the first circuit is a series of electrically connected LEDs 30 as shown in first column of columns A, B, C, D, E, F, G, H, I, J and the circuit of each column is also shown as AA, BB, CC, DD, EE, FF, GG, HH, II, JJ in figures 11A-11C or a series of electrically connected LEDs 30 as shown in first row 34 or first segment of individual segments 330, 332, 333 as shown in figure 35) and a second circuit (for example, figure 9, the second circuit is a series of electrically connected LEDs 30 as shown in second column of columns A, B, C, D, E, F, G, H, I, J and the circuit of each column is also shown as AA, BB, CC, DD, EE, FF, GG, HH, II, JJ in figures 11A-11C or a series of electrically connected LEDs 30 as shown in second row 34 or second segment of individual segments 330, 332, 333 as shown in figure 35), a first portion (for example, light emitting diodes of column A) of the plurality of light emitting diodes are connected to the first circuit, the first circuit can vary the intensity of light emitted by the first portion of the plurality

of light emitting diodes (column 18, lines 31 to 46, column 28, lines 43 to 51, column 30, lines 22 to 26), a second portion (for example, light emitting diodes of column B) of the plurality of light emitting diodes are connected to the second circuit, the second circuit can vary the intensity of light emitted by the second portion of the plurality of light emitting diodes (column 18, lines 31 to 46, column 28, lines 43 to 51, column 30, lines 22 to 26), the plurality of light emitting diodes have respective directions of light energy emission (figures 4, 6, 8 and 12), a second housing (the shell of 96.2, 120, figure 15; vehicle; 742, figure 60) and a power applying component (column 21, line 62; column 23, line 6; column 52, line 25; 738, column 52, line 32) disposed in the second housing, the power applying component is electrically coupled to the light emitting diodes for applying power to the light emitting diodes, and the first housing is rotationallv mounted to the second housing for revolving the first housing relative to the second housing to vary the direction of light energy emission relative to the second housing (figure 3; figure 15, hinge 744 allowing the first housing rotationally mounted to the second housing, figure 60; figure 66). However, Pederson does not specifically disclose that the first portion of the plurality of light emitting diodes emits light of a first color and the second portion of the plurality of light emitting diodes emits light of a second color different from the first color.

Column 21, lines 10 to 20 of Pederson state that the array of LEDs 30, the column 32 or row 34 may be formed of the same or different colored, a series of different colored LEDs, the controller may be configured to select the color of the LED's to be illuminated, the user may select blue, red, white, yellow, green, amber or any combination thereof, and the individual LED's may be selectively illuminated at the discretion of an individual.

It would have therefore been obvious to one skilled in the art to connect the light of the first portion of plurality of light emitting diodes of a first color and the second portion of the plurality of light emitting diodes of a second color different from the first color, as shown by column 21, lines 10 to 20 of Pederson, for illuminating different color LEDs as preferred at the discretion of an individual.

Regarding claim 76, a yoke (figure 3, the yoke which reference numeral 99 is pointing) is mounted for rotation to the first housing, the first housing comprises a lamp housing (12, 14, figure 3), the yoke is mounted for rotation to the second housing (figure 3, the yoke mounted for rotation to the second housing which is the shell where reference numeral 96.2 is pointing at), the

first housing is rotated in relation to the second housing by a motor (column 22, line 2), the second housing comprises an electronics housing (the shell where reference numeral 96.2 is pointing at comprises a housing that houses the motor which is electronic, the housing therefore comprises an electronic housing), the power applying component comprises an internal power supply (56, battery, column 18, line 67; column 21, line 62, 738, column 52, line 32), and

Regarding claim 77, a communications line (electrical wire, figure 3) is connected to the second housing.

13. **Claim 75 is rejected under 35 U.S.C. 103(a) as being unpatentable over Pederson in view of Bailey et al. (US 5,752,766, prior art cited by Applicant).**

Pederson discloses the invention substantially as claimed including a flexible substrate (column 20, line 66, column 21, lines 6 to 9, column 57, lines 7 to 8, the housing 14 is flexible to form variety of shapes as desired, the circuit board attached inside the housing is therefore also flexible to conform with the shape of the housing, note figures 4, 5 and 12), an actuator (40, 790, 806, 810) coupled to the flexible substrate, the first housing comprising a lamp housing (figures 3 to 5, 8 to 10, 31, 32, 35, 60 and 66), the light emitting diodes mounted on the flexible substrate (figures 3 to 5, 8 to 10, 31, 32, 35, 60 and 66), the flexible substrate mounted in the lamp housing (column 18, lines 60 to 63, 65 to 67, the circuit board 54 or LED mounting surface having microprocessor 52 contained within the housing 12), the second housing comprising an electronics housing (the external shell where reference numeral 96.2 is pointing at, figure 3; 120, figure 15; 742, figure 60), the power applying component comprising an internal power supply (56, battery, column 18, line 67; column 21, line 62; 738, column 52, line 32) with the exception of disclosing that the actuator is controllable for varying the basic directions of light energy emission relative to the electronics housing by deformation of the flexible substrate.

Bailey et al. teach that the actuator (26) connected to the flexible substrate (20) is controllable for varying the basic directions of light energy emission relative to the electronics housing by deformation of the flexible substrate (figure 2).

It would have been obvious to one skilled in the art to provide the actuator connected to the flexible substrate of Pederson which may be controlled to deflect the flexible substrate by

deforming the flexible substrate, as shown by Bailey et al., for varying the basic directions of light energy emission of the LEDs relative to the electronics housing.

14. **Claim 78 is rejected under 35 U.S.C. 103(a) as being unpatentable over Pederson.**

Pederson discloses a housing (12, 14, 324, 732, figures 3, 8, 9, 15, 31, 60 and 66), a substrate (54, LED mounting surface, column 18, line 66; 310, 482 and 788) disposed in the housing, the substrate having a plurality of individually controllable circuits (for example, figure 9, the different circuits are the different individual series of electrically connected LEDs 30 in different columns A, B, C, D, E, F, G, H, I, J and the circuits of these columns are also shown as AA, BB, CC, DD, EE, FF, GG, HH, II, JJ in figures 11A-11C or different individual series of electrically connected LEDs 30 as shown in different rows 34 or different individual segments 330, 332, 333 as shown in figure 35), first, second, third, fourth, and fifth light emitting diodes (for example, figure 9, LED 30 of first column A, LED 30 of column B, LED 30 of column C, LED 30 of column D, LED 30 of column E, or LED 306 of segment 330, LED 306 of segment 332, LED of segment 333 of figure 35) respectively fixed to the circuits of the substrate for directing light from the housing, wherein the first, second, third, fourth, and fifth light emitting diodes have respectively independently variable light intensities (column 18, lines 31 to 46, column 19, lines 1 to 3, column 28, lines 43 to 51, column 30, lines 22 to 26, column 31, lines 52 to 56). However, Pederson does not specifically disclose that the first, second, third, fourth, and fifth light emitting diodes respectively fixed to the circuits emit light of first, second, third, fourth, and fifth wavelengths produce respectively different colors.

Column 21, lines 10 to 20, column 31, lines 60 to 61 state that the array of LEDs 30, the column 32 or row 34 may be formed of the same or different colored, a series of different colored LEDs, the controller may be configured to select the color of the LED's to be illuminated, the user may select blue, red, white, yellow, green, amber or any combination thereof, and the individual LED's may be selectively illuminated at the discretion of an individual.

It would have therefore been obvious to one skilled in the art to select and connect the first, second, third, fourth, and fifth light emitting diodes respectively fixed to the first, second, third, fourth, and fifth circuits, as shown by column 21, lines 10 to 20 and column 31, lines 60 to

61 of Pederson, for emitting light of first, second, third, fourth and fifth wavelengths to produce respectively different colors as preferred at the discretion of an individual.

15. **Claims 79 to 82 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pederson.**

Regarding claim 79, Pederson discloses a lighting apparatus for projecting light onto a surface comprising a substrate (54, LED mounting surface, column 18, line 66; 310, column 31, line 28; circuit board or LED mounting surface 482, column 51, lines 48 to 49; 788), a first housing (12, 14, 324, 732, figures 3, 8, 9, 15, 31, 60 and 66) in which the substrate is located, a second housing (figure 3, the shell which reference numeral 96.2 is pointing; 120, figure 15; 742, figure 60), a first, a second and a third light emitting diode (for example, figure 9, LED 30 of column A, LED 30 of column B, LED 30 of column C; figure 35, LED 306 of segment 330, LED 306 of segment 332, LED 306 of segment 333), each of which is fixed to the substrate, a communications component (50, 52), wherein each of the first, second and third light emitting diodes emits light having an intensity (column 21, lines 10 to 20, column 31, lines 60 to 61), the substrate has first, second, and third circuits (for example, figure 9, the first circuit is a series of electrically connected LEDs 30 as shown in first column A, the second circuit is a series of electrically connected LEDs 30 as shown in second column B, the third circuit is a series of electrically connected LEDs 30 as shown in third column C and the circuit of each column is also shown as AA, BB, CC in figures 11A-11C or a series of electrically connected LEDs 30 as shown in individual first second and third row 34 or figure 35, a series of electrically connected LEDs 30 as shown in first segment 330, a series of electrically connected LEDs 30 as shown in second segment 332, a series of electrically connected LEDs 30 as shown in third segment 333), the first light emitting diode is connected to the first circuit and the first circuit can vary the intensity of light emitted by the first light emitting diode (column 18, lines 31 to 46, column 28, lines 43 to 51, column 30, lines 22 to 26), the second light emitting diode is connected to the second circuit and the second circuit can vary the intensity of light emitted by the second light emitting diode (column 18, lines 31 to 46, column 28, lines 43 to 51, column 30, lines 22 to 26), the third light emitting diode is connected to the third circuit and the third circuit can vary the intensity of light emitted by the third light emitting diode (column 18, lines 31 to 46, column 28,

lines 43 to 51, column 30, lines 22 to 26), each of the light intensities of the first, second and third light emitting diodes can be varied independently of each of the other light intensities of the first, second, and third light emitting diodes (column 21, lines 10 to 32), the communications component can receive a control command for varying either any of the light intensities of the first, second, and third light emitting diodes, the first housing can be positioned in relation to the second housing by remote control (figures 3, 15 and 60). However, Pederson does not specifically disclose that the first light emitting diode emits light of a first color which is green, the second light emitting diode emits light of a second color which is red and the third light emitting diode emits light of a third color which is blue or at least one of the first, second or third colors is a white color.

Regarding claims 80 and 82, Column 21, lines 10 to 20 state that the LEDs 30, the column 32 or row 34 may be formed of the same or different colored LED's, a series of different colored LEDs, the controller may be configured to select the color of the LED's to be illuminated, the user may select blue, red, white, yellow, green, amber or any combination thereof, and the individual LED's may be selectively illuminated at the discretion of an individual.

It would have therefore been obvious to one skilled in the art to select the first light emitting diode of a first color to be green and the second light emitting diode of a second color which to be red and the third light emitting diode of a third color to be blue or at least one of the first, second or third colors to be white color, as shown by column 21, lines 10 to 20 and column 31, lines 60 to 61 of Pederson, for illuminating light of a green color, red color and blue color or white color to produce different color of lights as preferred at the discretion of an individual.

Regarding claim 81, the remote control of the first housing in relation to the second housing is obtained by a motor (96.1, 96.2).

Allowable Subject Matter

16. Claims 1 to 12, 33 and 34 are allowed.

17. Claims 27 to 30, 44 to 47 and 65 to 68 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

18. Claim 74 would be allowable if rewritten to overcome the objection set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

The prior art individual or taken as a whole does not teach a variable filter which is a liquid crystal emulsion filter mounted to the first housing with the light emitting diodes emit light in a direction passing through the filter and a control command varying the optical state of the filter as required by the claims and there is no motivation absent the applicant's own disclosure to modify the references relied upon the rejections in the manner required by the claims.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Y Quach Lee whose telephone number is 571-272-2373. The examiner can normally be reached on Monday to Thursday from 8:00 am to 2:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jong-Suk (James) Lee, can be reached on Monday to Friday whose telephone number is 571-272-7044. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://portal.uspto.gov/external/portal. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Y. Q.
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